A NEW GENUS AND SPECIES OF DORYCTINAE (HYMENOPTERA: BRACONIDAE) WITH FUSED FIRST AND SECOND METASOMAL TERGA¹

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ABSTRACT: One new Doryctinae genus, *lare* and 2 new species (*I. rochae* and *I. ariquemes*) are described from Brazil. This new genus is characterized by the fusion of first and second metasomal terga.

The subfamily Doryctinae belongs to the Braconidae (Ichneumonoidea) and is one of the largest groups in this family. These wasps belong to the cyclostome Braconidae, which have a circular or oval oral opening formed by a concave clypeus and labrum (Sharkey, 1993; Marsh, 1997). They can be distinguished from the other cyclostome by the combination of the following characters: fore tibia with a row of spines on the anterior edge (90%); presence of a flange at the apico-lateral edges of the propleuron that extends over the ventral-lateral corner of the pronotum (Achterberg, 1993) and presence of a double node on the dorsal valve of the ovipositor.

This group is one of the most diverse in the Braconidae varying considerably in color, size and sculpture. Very little is known about its biology. Studies show that most are idibiont ectoparasitoids of wood-boring beetle larvae; a few attack stem boring Lepidoptera larvae and saw-fly larvae, and some species of the genus *Allorhogas* are phytophagous (Macedo & Monteiro, 1989; Marsh, 1991).

This paper presents the description of an unusual new genus and 2 new species of Doryctinae from Brazil.

The wasps of the subfamily Doryctinae can be easily identified by keys provided by Marsh, 1997. Terminology for sculpture follows Harris (1979).

Abreviations for the institutions that provided specimens for this study and where type specimens are deposited are: DCBU (Departamento de Ecologia e Biologia Evolutiva da Universidade Federal de São Carlos), INPA (Instituto Nacional de Pesquisas da Amazônia), IBGE (Instituto Brasileiro de Geografia e Estatística).

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Iare Barbalho & Penteado-Dias, NEW GENUS

(Figures 1-7)

Type species Iare rochae n. spec., Barbalho & Penteado-Dias

Occipital carina present (fig. 1) and meeting hipostomal carina; face granulate and slightly rugose; vertex, frons and temples granulate (fig. 1); malar space smooth; 20-29 antennomeres; metanotum and propodeum granulate; fore tibia with a row of 9 very short spines; hind coxae with a short basal tubercle; in fore wings (fig. 3):(RS+M)a curved, m-cu arising before 2RS; r-m vein present; first subdiscal cell open at apex and in hind wings: M+CU longer than 1M; first metasomal tergum short and fused to second plus third metasomal terga (fig. 4). Body length of 2.7-4.8 mm.

Male. Unknown.

Distribution . São Paulo, Federal District (Brasília), Rondônia and Manaus.

Etymology. The generic name is from the Tupy language Iáre meaning joined.

Comments. The fusion of the first and second metasomal terga is unusual and not found in other Doryctinae in the Neotropical Region.

Key to species of the genus Iare, NEW GENUS,

Barbalho & Penteado-Dias

(fig. 7) I. ariquemes

Iare rochae Barbalho & Penteado-Dias, NEW SPECIES (Figures 1-4)

Holotype: Head. (fig.1) Face granulate and slightly rugose; vertex, frons and temples granulate; face height 1.5 times longer than eye height; face width 1.8 times eye width; oral opening 1/2 of eye height; eye width 2 times longer than temple width; malar space shorter than oral opening; 25 antennomeres; first flagellomere about equal to length of scape and pedicel combined.

Mesosoma. (fig. 2) Pronotum transversally striate in dorsal view, and granulate in lateral view; mesonotum and mesopleura granulate, notauli present only anteriorly; sternaulus complete and granulate; propodeum granulate except by rugose areas; fore tibia with a row of 9 very short spines; hind coxae with a short basal tubercle.

Fore wings. (fig. 3) m-cu arising before 2RS; r-m vein present; first subdiscal cell open at apex, 2cu-a absent at apex.

Hind wings. (fig. 3) m-cu not tubular; r-m half of 1M.

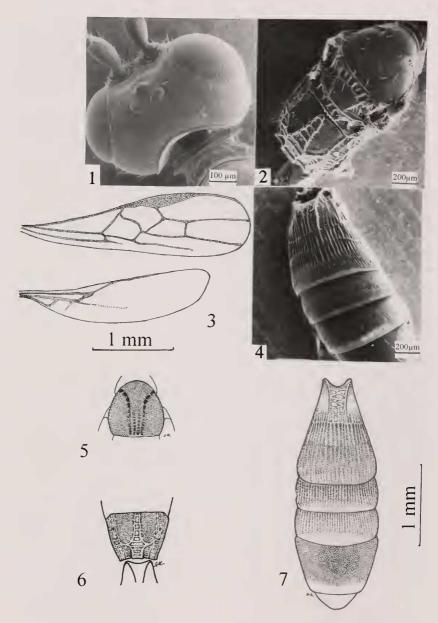
Metasoma. (fig. 4) First metasomal tergum short, broad and fused to second and third metasomal terga combined, first metasomal tergum with dorsal carina extending to the apex; most of third metasomal tergum and base of fourth and fifth metasomal terga longitudinally striate, remaining terga granulate; ovipositor equal to metasoma length.

Color. Head and thorax black; metasoma and ovipositor dark brown; legs light brown; wings hyaline; stigma brown.

Body length, 4.0 mm.

Variation in female. 20 to 29 antennomeres; ovipositor longer than metasoma; entire body black; 2.7-4.8 mm.

Male. Unknown.



Figs. 1-7. *lare rochae*, n. sp. 1, head (dorsal view); 2, mesosoma; 3, wings; 4, metasoma. *lare ariquemes*, n. sp. 5, mesoscutum; 6, propodeum; 7, metasoma.

Holotype: Female, Fazenda Canchim, São Carlos, SP, Brazil June, 20, 1985. L. A. Joaquim, col. (Sweeping the vegetation) (DCBU).

Paratypes: 4 females, Fazenda Esteio, Manaus, AM, Brazil September 17, 1986. B. Klein, col; at light, Fazenda Esteio, Manaus, AM, Brazil January 21,1986 (INPA); Reserva Ecológica do IBGE, Brasília, DF, Brazil September 25, to October 2, 1981 (IBGE) and Ubatuba, SP, Brazil October 20, 1990, L.A. Joaquin, col. (DCBU).

Etymology. Named for our colleague Odete Rocha, Universidade Federal de São Carlos, Depto de Ecologia e Biologia Evolutiva, São Carlos, SP, Brazil.

Iare ariquemes Barbalho & Penteado-Dias , NEW SPECIES (Figures 5-7)

Agrees with the description of *I. rochae*, except by: antennae broken; oral opening shorter than malar space; notauli scrobiculate, (fig. 5) complete but shallow; propodeum (fig. 6) smooth in lateral view and slightly granulate in dorsal view; first metasomal tergum striate only at apex and slightly longer (fig. 7), remaining terga striate except sixth tergum granulate.

Male. Unknown.

Holotype: Female, Ariquemes, RO, Brazil, November, 28, 1986 (INPA); Malaise trap, J. A. Rafael, col.

Paratype: Female, Ariquemes, RO, Brazil, November, 28, 1986 (DCBU); Malaise trap, J. A. Rafael, col.

Etymology: The specific name is based on the type locality in Brazil.

LITERATURE CITED

Achterberg, C. Van. 1993. Illustrated key to the subfamilies of the Braconidae (Hymenoptera – Braconidae). Zool. Verhand. 283: 1-189.

Harris, R. A. 1979. A glossary of surface sculpturing. Occ. Pap. Ent., 28: 1-31.

Macedo, M. V. & Monteiro, R. T. 1989. Seed predation by a Braconidae wasp, *Allorhogas* sp. (Hymenoptera). J. N.Y Entomol. Soc. 97: 358-362.

Marsh, P. M. 1991. Description of a phytophagous Doryctinae braconid from Brazil (Hymenoptera: Braconidae). Proc. Entomol. Soc. Wash. 91: 92-95.

Marsh, P. M. 1997. Subfamily Doryctinae, pp 206-233. In: Wharton, Marsh and Sharkey, eds. Manual of the New World Genera of the Family Braconidae. Special Publ. Internat. Soc. Hymenopterists.

Sharkey, M. J. 1993. Family Braconidae. In: Goulet, H. and Huber, J.T. Hymenoptera of the world: an identification guide to families. Centre for Land and Biol. Resources Research, Ottawa-Ontario, Research Branch Agric. Can. Publ.,